Subject: ETS MPS/PM-1 (Aqua) Engineering Release 6.4 Delivery Letter

Date: Tue, 3 Jul 2001 16:25:30 -0400 From: Ernest Quintin <equintin@csc.com>

To: Willie Fuller <wfuller@pop500.gsfc.nasa.gov>

Willie,

We are pleased to deliver Release 6.4 of the ETS Multimode Portable Simulator for PM-1 (MPS/Aqua). This engineering release delivery provides a resolution to Discrepancy Report (DR) SMOdr11184, as detailed in Attachment A and in the ESDIS DR Tracking Tool (DRTT).

There are three attachments to this letter:

- Attachment A describes the DR and provides installation instructions for this release.
- Attachment B contains an updated release history summary matrix.
- Attachment C contains an updated Mission Systems Configuration Management (MSCM) form.

The updated software executable modules are being delivered on CD-ROM. Two copies of the CD are being given to Guy Cordier, who will forward one copy to Raytheon at Denver and will use the other for installation on the MPS/Aqua simulator PCs in the Bldg 32 EOS ISR and LSR at GSFC. The updated software is also being installed on the serial card-equipped PCs in the Bldg 25 Simulations Operations Center and on the portable PCs, in the event that any of those units are needed to support upcoming Aqua data flows.

There are no User's Guide updates for this release.

If you have any questions about this delivery, please do not hesitate to contact me or Dave Green.

Ernest Quintin 301-805-3649

(See attached file: AttachA.doc)(See attached file: AttachB.doc)(See attached file: AttachC.doc)

#### CC:

alan.johns@gsfc.nasa.gov, Alexander.Krimchansky.1@gsfc.nasa.gov, gcordier@rattler-f.gsfc.nasa.gov, kcklem@west.raytheon.com, arhabeger@west.raytheon.com, wjohnson@eoc.ecs.nasa.gov, rmesserly@mail.gblt.averstar.com, vhruland@west.raytheon.com, pburrows@csc.com, jcarlson@csc.com, klavery@pop500.gsfc.nasa.gov, Van.Grant@honeywell-tsi.com, eshurie@pop400.gsfc.nasa.gov, lhepfer@csc.com, enoone@csc.com, klehtone@pop500.gsfc.nasa.gov, frank.scoville@omitron.com, fxu@csc.com, tnguye66@csc.com, rwinters@mail.gblt.averstar.com, ggarner@rattler-f.gsfc.nasa.gov, dsgreen@csc.com

## **Attachment A - Release 6.4 Delivery Contents and Installation Instructions**

The changes made to the MPS/Aqua software since the delivery of Release 6.3 are in response to the following Change Request (CR):

```
DR: SMOdr11184 (ETS0442)
                                     Related NCR:
                                                                   Submitted: 010629
 Status: NEW
                                     Class: ETS
 Title: Changes to database require changes to APID 1000 in MPS
 SUBMITTAL INFORMATION
  Project:
  DR Type:
                    Change Request
  Rel/Ver:
                     6.3
  Subsystem:
                      MPS-PM/Aqua
  Module:
                      Simulator
  Affected-Requirement:
  Test Phase: unit test
  Severity:
  Date found: 010623
  Location:
                    Denver
  Submitter:
                    Vince Ruland
  Organization:
                      EMOS
  Phone number: 720-895-4068
  Email:
                      vhruland@west.raytheon.com
 ****** Problem (Added 010629 by vruland) *******
 TRW has made changes to the TIE clock correlation packet on the spacecraft,
 these changes need to be carried through to the ONLINE software and the MPS
 simulator to verify clock correlation functionality. The packet is expected to
 change in the following manner:
 Table I Old Firmware
 Spacecraft Timed-Event Clock Sample Storage
 1553 Transmit Subaddress #2
 Word #1 Spacecraft time (bits 15:0)
Word #1
Word #2
Spacecraft time (bits 31:16)
Word #3
Spacecraft time (bits 47:32)
Word #4
Spacecraft time (bits 63:48)
Word #5
EPOCH TOD time (bits 15:0)
Word #6
EPOCH TOD time (bits 31:16)
Word #7
EPOCH TOD time (bits 47:32)
Word #8
EPOCH TOD time (bits 63:48)/VCDU Sequence Count MSW (bits 31:16)
Word #9
VCDU Sequence Count LSW (bits 15:0)
```

AttachA.doc A-1 07/03/01

The firmware has been corrected to write to words 9 and 10 per Table II New and Improved Firmware.

Table II New and Improved Firmware

```
Spacecraft Timed-Event Clock Sample Storage
1553 Transmit Subaddress #2
Word #1 Spacecraft time (bits 15:0)
Word #2 Spacecraft time (bits 31:16)
Word #3 Spacecraft time (bits 47:32)
Word #4 Spacecraft time (bits 63:48)
Word #5 EPOCH TOD time (bits 15:0)
Word #6 EPOCH TOD time (bits 31:16)
Word #7 EPOCH TOD time (bits 47:32)
Word #8 EPOCH TOD time (bits 63:48)
Word #9 VCDU Sequence Count MSW (bits 31:16)
Word #10 VCDU Sequence Count LSW (bits 15:0)
```

Words 9 & 10 are the values that have changed in the database and effect the VCDU sequence count location.

### The changed modules are:

Executable Module	Files
SCPM1.dll	ClcwPacket.cpp, TlmPacket.cpp, TlmVirtualChannel.cpp
nett.properties	Client properties description file.
property.txt	Server properties description file.

### **Installation Instructions**

The changed executable modules are contained within three folders on the delivered CD.

To install this release:

- navigate to the *Server* folder on the CD, select *SCPM1.dll*, and copy it to the *C:\Program Files\csc\Pm1 Server 6.3* folder, replacing the file of the same name.
- navigate to the *Server\properties* folder on the CD, select the *property.txt* file, and copy it to the *C:\Program Files\csc\PM1 Server 6.3\properties* folder, replacing the file of the same name.
- navigate to the *Client/properties* folder on the CD, select the *nett.properties* file, and copy it to the *C:\Program Files\csc\PM1 Client 6.3\properties* folder, replacing the file of the same name.

## **Attachment B - Release History Summary Matrix**

Attached is the release history summary matrix, which reflects the MPS/Aqua Release 6.4 delivery. Modules inherited from the SIMSS baseline have the SIMSS Release Number, while the MPS/Aqua modules EOSGS and SCPM1 have the current MPS/Aqua Release Number.

# **Release History Summary Matrix**

System: MPS/Aqua

Release Number		1.0	1.1	2.0	2.1	2.2	3.0	3.1	4.0	5.0	5.1	6.0 Beta	6.0 Beta Update 1
<b>Delivery Date</b>		7/30/99	9/2/99	9/24/99	10/25/99	11/18/99	12/17/99	1/21/00	3/17/00	5/12/00	6/22/00	7/28/00	9/14/00
Configuration Item	CI No.												
Core (Client)	1.1	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	2.0	2.0
Core (Server)	1.2	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	2.0	2.0
SC-PM1 (Client)	1.3	1.0	1.1	2.0	2.1	2.2	3.0	3.1	4.0	5.0	5.0	6.0	6.0
SC-PM1 (Server)	1.4	1.0	1.1	2.0	2.1	2.2	3.0	3.1	4.0	5.0	5.1	6.0	6.0
GS (Client)	1.5	1.0	1.1	2.0	2.1	2.2	3.0	3.1	4.0	5.0	5.0	6.0	6.0
GS (Server)	1.6	1.0	1.1	2.0	2.1	2.2	3.0	3.1	4.0	5.0	5.0	6.0	6.0
IP Input (Client)	1.7	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	2.0	2.0
IP Input (Server)	1.8	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	2.0	2.0
IP Output (Client)	1.9	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	2.0	2.0
IP Output (Server)	2.0	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	2.0	2.0
DQM (Client) <sup>1</sup>	2.1												
DQM (Server) <sup>1</sup>	2.2												
Logging (Client)	2.3	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	2.0	2.0

<sup>&</sup>lt;sup>1</sup> To be delivered in a future release

Release Number		1.0	1.1	2.0	2.1	2.2	3.0	3.1	4.0	5.0	5.1	6.0 Beta	6.0 Beta Update 1
<b>Delivery Date</b>		7/30/99	9/2/99	9/24/99	10/25/99	11/18/99	12/17/99	1/21/00	3/17/00	5/12/00	6/22/00	7/28/00	9/14/00
Configuration Item	CI No.												
Logging (Server)	2.4	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	2.0	2.0
Scenario (Client) <sup>2</sup>	2.5								1.0	1.1	1.1	2.0	2.0
Scenario (Server) <sup>2</sup>	2.6								1.0	1.1	1.1	2.0	2.0
Serial Input (Client) <sup>2</sup>	2.7								1.0	1.1	1.1	2.0	2.0
Serial Input (Server) <sup>2</sup>	2.8								1.0	1.1	1.1	2.0	2.0
Serial Output (Client) <sup>2</sup>	2.9								1.0	1.1	1.1	2.0	2.0
Serial Output (Server) <sup>2</sup>	3.0								1.0	1.1	1.1	2.0	2.0
TxFile (Client) <sup>3</sup>	3.1												
TxFile (Server) <sup>3</sup>	3.2												

<sup>&</sup>lt;sup>2</sup> New in Release 4.0 <sup>3</sup> New in Release 6.0

# **Release History Summary Matrix, Continued**

**System:** MPS/Aqua

Release Number		6.0	6.1	6.2	6.3	6.4				
Delivery Date		9/28/00	11/17/00	2/9/01	06/15/01	07/03/01				
Configuration Item	CI No.									
Core (Client)	1.1	2.0	2.0	4.0	4.1	4.1				
Core (Server)	1.2	2.0	2.0	4.0	4.1	4.1				
SC-PM1 (Client)	1.3	6.0	6.0	6.2	6.3	6.4				
SC-PM1 (Server)	1.4	6.0	6.0	6.2	6.3	6.4				
GS (Client) <sup>7</sup>	1.5	6.0	6.0	6.0	2.0	2.0				
GS (Server) <sup>7</sup>	1.6	6.0	6.0	6.0	2.0	2.0				
IP Input (Client)	1.7	2.0	2.0	4.0	4.1	4.1				
IP Input (Server)	1.8	2.0	2.0	4.0	4.1	4.1				
IP Output (Client)	1.9	2.0	2.0	4.0	4.1	4.1				
IP Output (Server)	2.0	2.0	2.0	4.0	4.1	4.1				
DQM (Client) <sup>4</sup>	2.1									
DQM (Server) <sup>4</sup>	2.2									
Logging (Client)	2.3	2.0	2.0	4.0	4.1	4.1				

<sup>&</sup>lt;sup>4</sup> To be delivered in a future release <sup>7</sup> In Release 6.3 the Aura/EOSGS module replaced the Aqua/GSPM1 module

Release Number		6.0	6.1	6.2	6.3	6.4				
Delivery Date		9/28/00	11/17/00	2/9/01	06/15/01	07/03/01				
Configuration Item	CI No.				<u> </u>	<u> </u>				
Logging (Server)	2.4	2.0	2.0	4.0	4.1	4.1				
Scenario (Client) <sup>5</sup>	2.5	2.0	2.0	4.0	4.1	4.1				
Scenario (Server) <sup>5</sup>	2.6	2.0	2.0	4.0	4.1	4.1				
Serial Input (Client) <sup>5</sup>	2.7	2.0	2.0	4.0	4.1	4.1				
Serial Input (Server) <sup>5</sup>	2.8	2.0	2.0	4.0	4.1	4.1				
Serial Output (Client) <sup>5</sup>	2.9	2.0	2.0	4.0	4.1	4.1				
Serial Output (Server) <sup>5</sup>	3.0	2.0	2.0	4.0	4.1	4.1				
TxFile (Client) <sup>6</sup>	3.1	2.0	2.0	4.0	4.1	4.1				
TxFile (Server) <sup>6</sup>	3.2	2.0	2.0	4.0	4.1	4.1				
vcProcessor (Client) <sup>8</sup>	3.3				4.1	4.1				
vcProcessor (Server) <sup>8</sup>	3.4				4.1	4.1				

<sup>&</sup>lt;sup>5</sup> New in Release 4.0 <sup>6</sup> New in Release 6.0 <sup>8</sup> New in Release 6.3

## <u>Attachment C — Mission Systems Configuration Management Form</u>

This attachment contains the completed Mission Systems Configuration Management (MSCM) form for the delivery of MPS/Aqua Release 6.4.

Mission Systems Configuration Management Form

1. ORIGINATOR	1	NIZATION	3. PHONE			
Dave Green	CSC		301-805-3420	dsgreen@cs	c.com	
5. ELEMENT			6. INSTALLATIO	NUMBER		
ETS (MPS/PM1)			Routine		(Assigned by C	M Office)
8. SOURCE CHANGE		9. APPROVAL	<u>.S</u>		1	
REQUEST(S):		Element Mana	ger			/
ETS delivery of MPS for (MPS/PM1)	EOS PM-1	Flight Ops Dir	ector			/
(MFS/FMII)		Operations Ma	nnager		_	/
10. DELIVERED SYSTEM	(Check all	that apply)				
Na	ame	Version	Media Identif	ication		Identification Date
Hardware			_			- <u></u> ,
$\boxtimes$ Software $\underline{M}$	PS/PM1	R6.4	CD-ROM			07/03/01
Database						
□ Documentation:     □						
MPS/PM1 delivery pa	ckage	N/A	<u>via email</u>	07/03/01		
			_			
			_			
Other						
11. CHANGE DESCRIPT	<u>ION</u>					
Release 6.4 of MPS/PM-1	(MPS/PM-1	.)				
12. ATTACHMENT(S): C	heck if YES	$\boxtimes$				
Description: MPS/PM1 R	telease 6.4 de	elivery package (d	cover letter with atta	chments) dated (	07/03/01	
13. CM OFFICE USE						
	Loc	ation (Bldg/Roon	n) Slot	location(s)		
Hardware		/	_			
Media		/	_			
Documentation		/			_	
Installation date		/ /	CM	Office Signature		

Form MSCM (970327)